

Appl. No. 10/603,546

Examiner: RIELLEY, ELIZABETH A, Art Unit 2879

In response to the Office Action dated December 13, 2005

Date: March 31, 2006

Attorney Docket No. 10112271

Applicant submits that claims 1, 2, 5-9, 14-29 as pending are clearly in condition for allowance, as will be discussed in further detail herein below. The remarks of the instant response are provided to further clarify and distinguish Applicant's invention over the prior art relied upon by the Examiner in the office action.

Reconsideration of this application is respectfully requested in light of the following remarks.

Claims 1, 2, 5-9 and 14-24

Claims 1, 2, 5-9 and 14-24 stand rejected over the combination of Toyoda and Barton and, for some of the claims, in further view of one of Sakaguchi, Amrine, or Yakou. Applicant respectfully traverses the rejections for the reasons as follow.

The rejections of claims 1, 2, 5-9 and 14-24 are insufficient, insofar as they do not comply with the requirements of MPEP 707.07 et seq., which requires that all rejections be stated with completeness and clarity.

MPEP 707.07(d) requires that the grounds of a rejection be "fully and clearly stated." The office action fails to meet this requirement in the present application in connection with claims 1, 2, 5-9 and 14-24.

Claim 1 recites a method of repositioning display spacers using inductive attraction, comprising:

- providing magnetic spacers;
- providing an inductive chuck to attract the spacers by magnetic force;
- providing a substrate; and
- using the inductive chuck to position the spacers in desired positions on the substrate.

In the rejections, the Examiner appears to rely on reference items 1 and 2 of Toyoda to teach the spacers of the claimed invention and reference item 4 to teach the inductive chuck of the claimed invention. See page 3 of the office action. In Toyoda, reference item 1 refers to an intaglio (i.e., a mold), while reference item 2 refers to barrier rib material which is bonded onto a substrate 5. Reference number 4 refers to a sheet-form rubber magnet.

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In the office action, the Examiner acknowledges that Toyoda fails to teach the spacers are magnetic and instead relies on Barton to teach this feature. See page 3 of the office action. However, as noted in the amendment filed on December 7, 2005, mold 1 does include magnetic material. Namely, temporary fixation of the mold to support member 3 is achieved by magnetically fixing the mold 1 to support member 3 by rubber magnet 4. See paragraph 0052 of Toyoda. Applicant contends that the Examiner's position that mold 1 is part of the spacers and her position that Toyoda fails to teach magnetic spacers is contradictory, as Toyoda expressly states the mold 1 comprises a support plate "which has the magnetism" in paragraph 0052.

Given the contradiction in positions, it is impossible for the Applicant to determine what the Examiner is relying on to teach the spacers: the barrier rib material 2 alone or the combination of the barrier rib material 2 and the mold 1?

Applicant therefore submits that the rejection of claim 1, 2, 5-9 and 14-24 should be withdrawn. Should an ensuing office action be mailed which provides new grounds for the rejection of claims 1, 2, 5-9 and 14-24, such an ensuing office action should be made non-final.

The office action fails to establish a prima facie case of obviousness in that it does not establish suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine reference teachings.

To establish *prima facie* obviousness of a claimed invention, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). However, if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Applicant first submits that the mold 1 is not a display spacer as recited in the claims, since the mold is peeled off to leave the barrier rib (paste-like barrier rib material 2) on the substrate. See

Appl. No. 10/603,546

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the Abstract of Toyoda. In other words, mold 1 is a part of an apparatus including roller 6, support member 3, and rubber magnet 4 for transferring the "spacers" 2 onto the substrate, as opposed to being part of the spacers themselves.

Furthermore, as the Examiner acknowledges that Toyoda fail to teach the spacers in are magnetic, and mold 1 is expressly disclosed as comprising magnetic material, Applicant concludes that the Examiner is referring to barrier rib material 2 to teach the spacers of the claims. As noted in previous papers, the barrier rib material 2 described by Toyoda is not magnetic. Instead, the Examiner relies on Barton to teach this feature.

As set forth in the Abstract, the stated purpose of Toyoda is:

To smoothly transfer a three-dimensional structure in a good accuracy without considerable influence of the adhesive strength and the mold releasability of a structural material by using a sheet-like transfer intaglio, temporarily fixing the intaglio to a support, press bonding the material together with the intaglio to a base by utilizing the support, then releasing the temporary fixing, and thereafter releasing the intaglio so as to peel it from the base.

[Emphasis added]

However, if the barrier rib material 2 were magnetic, the smooth and accurate transfer would be negatively impacted. Namely, Toyoda teaches that the paste-like barrier rib material 2 is filled into a mother die 1b attached to the magnetic base material 1a (referring to Fig. 2A). A rubber magnet 4 is provided to attract the magnetic base material 1a to fix on a stainless plate 3a of support member 3 (referring to Fig. 2B). A press roller is provided to press the back face of the stainless plate 3a to contact-bond the mold 1 and barrier rib material to a substrate 5 and move in a predetermined direction. Simultaneously, the rubber magnet 4 is peeled off the back face of mold 1 (referring to Fig. 2D). Finally, the mother die 1b and the magnetic base material 1a are peeled from the substrate and the barrier rib is left on the substrate 5 (referring to Fig. 2D).

If the barrier rib material 2 were magnetic, undesirable magnetic attraction or repulsion would

Appl. No. 10/603,546

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Attorney Docket No. 10112271

occur between the barrier rib material 2 and the rubber magnet 4 and/or the magnetic base material 1a, having an adverse impact when positioning and/or peeling the rubber magnet 4 off the back face of mold 1, and/or the step of peeling the mold 1 away from the barrier material 2. For example, attraction or repulsion of the barrier rib material 2 by the rubber magnet 4 and/or the magnetic base material 1a would interfere with the smooth release of the mold 1 from the rubber magnet 4 or mold 1 from the barrier rib material 2 due to undesired magnetic interaction between the spacers and the positioning apparatus. Thus, the stated purpose of Toyoda to "smoothly transfer a three-dimensional structure in a good accuracy" would not be achieved.

Applicant therefore respectfully submits there is no motivation for a person of ordinary skill in the art to combine the method of depositing spacers of Toyoda with the magnetic spacer material of Barton since undesirable attraction or repulsion would exist between the barrier rib material 2, the base material 1a and rubber magnet 4.

For at least this reason, a *prima facie* case of obviousness cannot be established in connection with claim 1. Furthermore, as it is Applicant's belief that a *prima facie* case of obviousness is not established for claim 1, the Examiner's arguments in regard to the dependent claims are considered moot and are not addressed here. Allowance of claims 1, 2, 5-9 and 14-24 is respectfully requested.

Claims 23-24

Claim 23 recites that the magnetic force lifts the spacers and brings them into contact with the inductive chuck.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). See MPEP 2143.03.

With respect to claims 23-24, Applicant notes that the Examiner again relies on both the mold 1 and the barrier rib material 2 to teach the spacers. This contradicts her position that Toyoda

Appl. No. 10/603,546

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Date: March 31, 2006

Attorney Docket No. 10112271

does not teach magnetic spacers, as Toyoda expressly teaches that mold 1 contains magnetic materials. Furthermore, as noted above, mold 1 is not a display spacer, but rather part of a transferring apparatus.

The Examiner relies on rubber magnet 4 to teach the inductive chuck of claim 1. The term "contact" refers to the state or condition of physical touching. See *New Oxford American Dictionary, 2nd Edition*. Barrier rib material 2 never contacts rubber magnet 4. Furthermore, given the function of the mold 1 in transferring the barrier rib material 2 to the substrate, it would be impossible to modify Toyoda to obtain this contact. Applicant therefore submits that even when combined, Toyoda and Barton fail to teach or suggest all the limitations of claim 23.

Furthermore, even if mold 1 is considered to be part of the spacer, it never contacts rubber magnet 4. Instead, temporary fixation of the mold to support member 3 is achieved by magnetically fixing the mold 1 through the stainless plate 3a of the support member 3 by rubber magnet 4. In other words, support member 3 is interposed between mold 1 and rubber magnet 4. See paragraph 0052 and Fig. 2B of Toyoda in this regard.

For at least these reasons, claims 23-24 are believed to be allowable over the cited references.

Claims 25-29

Claims 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toyoda in view of Barton. Applicant respectfully traverses the rejections for the reasons as follow.

Claim 25 recites A method of repositioning display spacers using inductive attraction, comprising:

providing spacers made of electrostatic materials;

providing an inductive chuck to attract the spacers by ***electrostatic force***;

providing a substrate; and

using the inductive chuck to position the spacers in desired positions on the substrate.

Appl. No. 10/603,546

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Date: March 31, 2006
Attorney Docket No. 10112271

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In the rejection of claim 25, the Examiner relies upon the disclosure in column 3, lines 64-65 of Barton to teach the step of providing spacers made of electrostatic materials. However, this paragraph of Barton reads:

Magnetic material may be present in the spacer wall along its face. The magnetic material causes the trajectories of secondary electrons emitted by the wall to be altered in a way that further inhibits them from escaping the wall.

There is no teaching in Barton that the spacers are made of electrostatic materials, or that they would be attracted by an electrostatic force.

Claim 26 recites that the electrostatic force lifts the spacers and brings them into contact with the inductive chuck. In this regard, Applicant refers the Examiner to the arguments presented in connection with claim 23. Namely, barrier rib material 2 never contacts rubber magnet 4, and furthermore, support member 3 is interposed between mold 1 and rubber magnet 4.

It is therefore Applicant's belief that even when taken in combination, the prior art references relied upon by the Examiner do not teach or suggest all the limitations of claims 25 and 26. For at least this reason, a *prima facie* case of obviousness cannot be established in connection with these claims. Furthermore, as it is Applicant's belief that a *prima facie* case of obviousness is not established for claims 25 and 26, the Examiner's arguments in regard to the dependent claims are considered moot and are not addressed here. Allowance of claims 25-29 is respectfully requested.

Conclusion

For the reasons described above, the Applicant believes that the application is now in condition for allowance and respectfully requests so.

Appl. No. 10/603,546

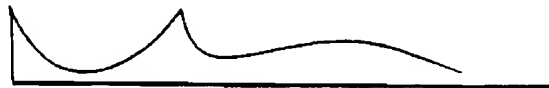
Examiner: RIELLEY, ELIZABETH A, Art Unit 2879

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Respectfully submitted,



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